THE CHEMIST

SEPTEMBER 1948 VOLUME XXV, No. 9

—Nucamera Studio

RE-ELECTED SECRETARY

DR. LLOYD VAN DOREN

Chemical Consultant, Watson, Bristol, Johnson & Leavenworth

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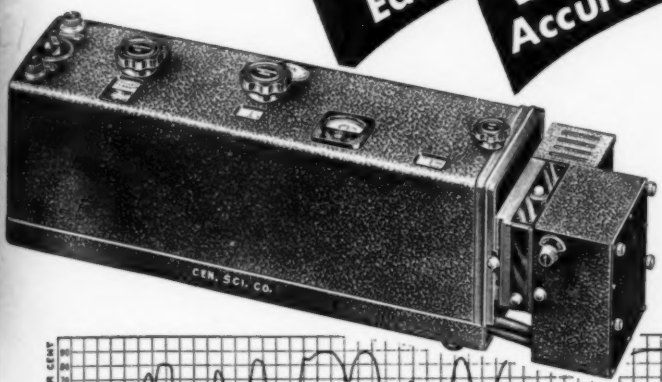

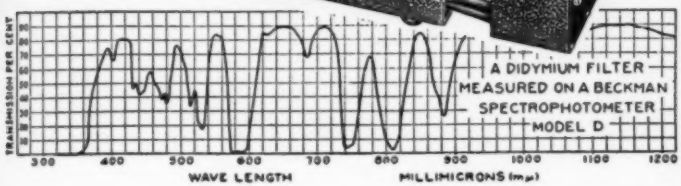

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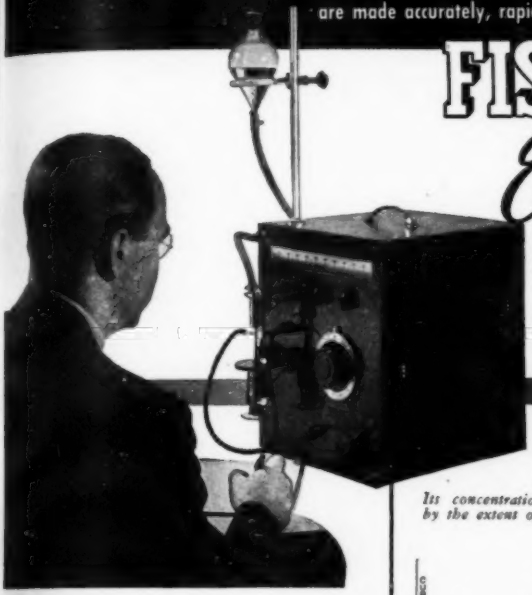

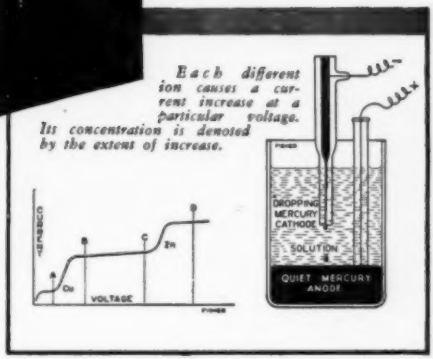

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The Chemist

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IN THIS ISSUE

Cover Picture

Dr. Lloyd Van Doren, secretary, A.I.C., is chemical consultant, patents and patent causes, Watson, Bristol, Johnson and Leavenworth, New York, N. Y. He received the B.S. and M.S. degrees from Gettysburg College and the Ph.D. degree in chemistry at Johns Hopkins University, where he was elected to Phi Beta Kappa. He was instructor of chemistry at Lowell Textile School, Lowell, Mass., assistant professor of chemistry at the University of Akron, and professor and head of the Department of Chemistry at Earlham College, Richmond, Indiana; First Lieutenant, C.W.S., 1918; consulting chemist and patent attorney for the Chemical Foundation, Inc., and member of the Patent Division of Allied Chemical and Dye Corporation. He is a charter member of the A.I.C., twice national vice president, chairman of the New York Chapter (1928), national councilor, and member of various committees. He is secretary of The Chemists' Club of New York, N. Y.; previously, member of the Board of Education, and at present, member of the Common Council, North Plainfield, N. J.

Scheduled for Later Issues

Has the Chemist's Professional Status Improved?—A Survey.
"The Future Role of the Analytical Chemist," by Dr. Walter J. Murphy, F.A.I.C.
"Rewards from Creative Work," by Marvin J. Udy, F.A.I.C.
"Visit to a Flax Paper Mill."
Some Letters from 25-Year Members.
Other Material.

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The Influence of the Technical Man in Society

Dr. Otto Eisenschiml, F.A.I.C.

President, Scientific Oil Compounding Company, Chicago, Illinois.

(Abstract of paper read at the Chicago Technical Conference, March 24 1948, before the Panel of The American Institute of Chemists.)

THE influence of a technical man on the community in which he lives depends upon the individual. There is no formula for it; if there were, I for one would like to have someone slip it to me.

As matters stand today, the world does not expect technical men to influence public opinion; that privilege, since the days of old, has been reserved for the old-time professions: lawyers, bankers, ministers, and above all, politicians. Only when the wise men of the country admittedly get out of their depths, do they call on us for help; otherwise, no one cares what our opinion is, or if we have any.

Being a chemist myself, I shall illustrate my points as they pertain to my own profession, although they apply to other technical branches as well. For more years than I care to mention, I have followed newspapers and newspaper polls on questions of public interest. The number of times a chemist is mentioned by name during a year, you can count on your fingers; for the times one is included in a newspaper poll, a four-fingered man would have three fingers too many. I am neither blaming the newspapers nor public opinion. Public opinion is nothing but the sum total of public thinking, and newspapers are largely a reflection of the prevalent modes of thought. New ideas may eventually make their impact felt, but they must fight their way to the top, no matter how simple and sound they may be. Today, for example, we accept women's suffrage and limited working hours in plants and offices as a matter of course, but both were only brought about after a hard struggle under bold and fearless leadership. If technical men want to influence public opinion they must fight for it, make no mistake about it. Moreover, they must realize that they are up against a dense wall of prejudice and mental resistance, which will not be breached easily.

Let me give you an illustration, and forgive me for talking about myself. The first time I stepped out into the open by publishing a book pertaining to Lincoln, the critics acted as if I had slapped their faces. What right did a chemist have, they shouted,

going outside his laboratory? Lawyers, poets, newspaper men, ministers, they all could write about Lincoln or about anything else, for that matter, but a technical man? Ridiculous! One might have thought that a chemist, whose profession carries the love for truth upon his banner, should be particularly well-equipped to undertake historical studies. But not so. This subject must be left to lawyers who live on precedents, to ministers who live on faith, and to poets who live in the clouds.

Every technical man who does non-technical writing will find himself up against a like handicap. A chemist is supposed to pour mysterious liquids all day long from one beaker into another, and a civil engineer to bend over his drawing table, a pencil in one hand a slide rule in the other. Will the time ever come when the world will accord them full human rights outside their places of work? Yes. But not before we step-children of society have forced the community to respect us. And respect is not only based on what men say and do, but how and when they say it. If they say it without attracting attention, they might as well keep quiet. Diamonds hidden in a basement will not be admired, no matter how brilliantly they glitter.

Not that the technical man is without blame, for he does about everything he can to keep these fairy tales about him intact, and habitually hides his talents in the basement. For years I have watched them as speakers before outside groups, not a frequent occurrence; but when they do manage to get themselves invited, they invariably speak on technical subjects. Some even try to impress the audience with complex scientific terms. The results which follow can be calculated with mathematical certainty, and sum up like this: increased respect for the man in his own narrow field, but a mingled feeling of pity and contempt for him aside from it.

What to Do

How can this situation be changed? It seems to me there are two avenues of approach; one by individual efforts, the other by mass action. Individually the technical man can bring himself to the attention of his community by helping to solve its problems, with an emphasis on things of a non-technical nature. He will find his task easier, if the community in which he lives is comparatively small. He can become a member of various boards, he can display his organizational talents, he can even be a social lion. Any one of these lines will lead toward opening people's eyes.

In bigger communities, mass action is likely to produce better results; mass action being nothing more than individual efforts combined into a common spearhead. I wish, for instance, that professional men would try harder to appear oftener before lunch clubs and other groups to dis-

cuss current events and problems. It may take some time to educate the public that such questions need not be the sole mental property of politicians, lawyers, and ministers. I would like to hear exclamations such as this: "Whoever would have thought that a chemist (civil engineer, architect, etc.) can entertain such sound thoughts on communism, (music, professional football, etc.) and express them so well?

Here is a piece of news. My friend, Dr. Ray Seymour, director of the Industrial Research Institute of Chattanooga, recently helped to bring the Detroit orchestra to his home town, and his name was prominently mentioned by the Press in connection with this venture. I feel reasonably certain that the good people of Chattanooga rubbed their eyes in wonderment. Research Institute? Chemist? Symphony orchestra? How did these things hang together? Could it be that a chemist was a human being after all and had interests outside his laboratory? I wish we could read more news of this kind. In fact, I wish we could read so many of them that they would cease to be considered news.

Benefits to Society

The motives underlying the course I recommend are partly selfish, partly altruistic. Selfish insofar as they foster the standing of the individual as well as of his profession; altruistic because they benefit the entire community. We need not apologize for intruding ourselves into the community life for selfish reasons. An increased influence of technical minds on current events will redound to much greater advantage to the community than it does to ourselves. With the world in the turmoil it is, a little straight thinking by trained brains will do it a lot of good. Nevertheless, let us not forget ourselves entirely in this endeavor to do good. I am sick and tired to hear talks and read sermons on the responsibilities of chemists toward their co-citizens. It certainly should be a matter of reciprocity, and I hate to guess which of the two groups has so far accumulated the greater credit balance. It probably will continue to do so in the future.

Oh, yes, we have publicity committees, I know. They notify the press of addresses about to be delivered, and if they concern a new wonder-drug, atomic energy, or some other subject which makes attractive headlines they will receive attention. Publicity committees rarely accomplish more than that. I never heard of a long-range publicity program such as is necessary to give the technical man his place in the sun. I would suggest that a trained newspaper man sit in on the meetings of technical executive boards, and advise them how to shape their activities to best advance their standing. I would like to see them pick technical men

for their ability and willingness to take part in public discussions or enterprises.

Programs of technical societies should be so arranged as to attract attention, and some of them should be devoted to public programs rather than to highly specialized subjects. Let us soft-pedal science for a while, and put an emphasis on the individual scientist. In other words, we technical men and scientists will have to sell ourselves to the community, both as groups and individuals, with much greater effectiveness than heretofore, and in order to do this we will need a sales program. To reach our goal will require a long, up-hill fight, but with worldly events hinging more and more on science and technical skill, the eventual out-come should not be in doubt.

In conclusion may I suggest that you read the papers and see how much of this technical conference you have seen reported?

A.O.C.S. Fall Meeting

The Fall meeting of the American Oil Chemists' Society will be held at the Pennsylvania Hotel, New York, N. Y., November 15-17th. Dr. Foster D. Snell, F.A.I.C., is general chairman and H. W. Vahlteich is program chairman. Papers are being solicited on soap, drying oils, and general topics in the oil and fat industry.

Sir Raman Visits the U. S.

Sir C. V. Raman, discoverer of the Raman effect and Nobel prize winner, visited Polytechnic Institute of Brooklyn from August 16th to 25th for discussion with Dr. I. Fankuchen, head of the Division of Applied Physics there. This visit completed Sir Raman's five weeks tour of the United States, during which he attended a session in Washington, D. C., of the Advisory Council of the International Bank for Reconstruction and the Congress, at Harvard University, of the International Union of Crystallography.

Until recently, Sir Raman was connected with the Indian Institute of Science. Upon his return to Bangalore, Mysore Province of Southern India, he will direct research and teaching at the Raman Research Institute, which was completed in 1947. It is patterned after the Royal Institute of London, and dedicated to fundamental research. Sir Raman plans to make it a leading scientific research center and an international culture center. For its museum, he is collecting samples of fine crystals to add to his collection which includes some 500 rare diamonds.

Quagliano, to Notre Dame

Dr. V. Quagliano, M.A.I.C., formerly Assistant Professor at the University of Maryland, is now with the Department of Chemistry, University of Notre Dame, Notre Dame, Indiana.

Industry Goes to School

J. Manczyk

Director of Education, Production Division, Joseph E. Seagram & Sons, Inc.

(An abstract of talk given before the Chicago Chapter, A.I.C.)

ONE of the functions of the new employee is to learn in what ways he can contribute to the progress of his company. How can he put the learning which he has acquired in school to practical use in industry? First of all, he must acquire a thorough knowledge of operations in all departments in the plant. One method of accomplishing these things is through what may be called the "rotation plan," i.e. a program which gives the employee an opportunity to perform different types of work in all divisions of the organization, thus helping him to gain the maximum amount of experience in his company.

A rotation procedure must include education and training programs which assist the employee in mastering new jobs and which supplement practical experience with theoretical experience. Aside from immediate practical application, continued study keeps minds alert and helps employees to adjust themselves to any changes in manufacturing practices which occur as a result of scientific progress. For this reason, it is best to endorse all educational endeavors regardless of their direct application to a particular company.

All companies have some type of rotation supplemented by education and training programs. The methods and procedures as they have been developed for the particular needs of my own company are of interest for their application to other industries.

When we investigate educational activities in the plants, we find that their efficient administration depends upon the establishment of basic procedures which assure a continued operation of any given program. Haphazard instruction is time-consuming and ineffective. When special classes and schedules are arranged to meet an immediate problem for a specific group of employees, a large amount of labor is required in the preparation of educational material which proves of little use in future groups. In other words, education should not be based on a succession of "operational emergencies" or sporadic ventures in this field. There must be a fundamental belief on the part of top management in the values derived from education

(See: *A Rebel Yells*, H. Frederick Willkie, D. Van Nostrand Company, Inc. New York), supported by a sustained, organized continuous program.

A basic element of such a plan must be a system whereby successive groups of employees are available for each phase of instruction, so that it becomes possible to repeat each program and to provide continuous education throughout the plants with a minimum of administrative effort. Adoption of standard procedures does not interfere with individual initiative to choose methods of instruction. On the contrary, through the established programs, a place is provided in the working schedule of an employee, not only for the presentation of any new information but also for the development of individual teaching ability.

In fact, it is recommended that, whenever feasible, oral instruction, discussions, and lectures by representatives of management take the place of the educational material suggested for each program. However, since qualified speakers are not always available, material must be furnished by the education department for the various activities so that effective instruction will be available to employees at all times.

Cleveland Symposium

The Fourth Annual Cleveland Symposium, sponsored jointly by the Cleveland Sections of the American Chemical Society, the American Institute of Chemical Engineers, and the Electrochemical Society, will be held at the Hotel Carter, Cleveland, on September 25th. The subject of the symposium is "Surface Chemistry." Speakers include Dr. A. T. Gwathmey, University of Virginia, "Crystal Structure and Surface Behavior;" Dr. J. H. Boyd, consultant, "Developments and Trends in Industrial Catalysts;" W. S. Loose, Dow Chemical Company, "Surface Reactions of Magnesium as an Anodic Material;" V. M. Darsey, Parker Rust Proof Company, "Phosphate Coating of Metal;" H. C. Miller, Charles Hardy, Inc., "Principles of Powder Metallurgy," and C. W. Patten, The Bakelite Corporation, "New Developments in Organosols and Plastisols."

Honor Scroll Award

Dr. Roy C. Newton, F.A.I.C., vice president in charge of research Swift and Company, Chicago, will be presented with the Honor Scroll of the Chicago Chapter of THE AMERICAN INSTITUTE OF CHEMISTS at its fall meeting to be held in Chicago. Dr. Newton is being honored for his research activities which have contributed many valuable processes and products to the food industry.

The Question

Looking back over twenty-five years, what advice would you give to young chemists who are starting out today?

(Asked of members who joined the A.I.C. in 1923, our founding year.)

The Answers

—Salem Studio

Dr. William S. Calcott

By William S. Calcott, Assistant Chemical Director, Organic Chemicals Department, E. I. du Pont de Nemours & Company, Wilmington, Delaware:

"Think more of what they can put into the job than what they can get out of it."

Gabriel D'Eustachio

By Gabriel D'Eustachio, Consulting Chemical Engineer, 175 Water Street, Perth Amboy, New Jersey:

"Do not consider the starting pay as the only compensation for the work you do. Young chemists need experience and need to build up an ethic which they do not build in the colleges. The American Institute of Chemists tries to establish an ethic and build up the morale of the young chemist. These two qualifications constitute the 'Science of good life'."

By Leland A. Dubbs, Private Research, 22108 South Avalon Boulevard, Torrance, Route, 2, L. A. County, California:

"Specialize in some branch of the profession and endeavor to become

—Helfs Studio

Leland A. Dubbs

outstanding in that respect. In my opinion it would be better for a chemist to have several capabilities to work at in the event he could not obtain suitable employment as a chemist. In that event he would work at one of his other capabilities until he could find suitable chemical employment."

By Dr. Edwin E. Hutching (retired, Box 1435, Carmel, Calif.:

"Their mental outlook must not be limited by the walls of their laboratories. There must be a full realization of chemistry's and the chemists' close relationship to world economy and to social factors. The chemists' thoughts and studies should ever so be oriented."

By Albert J. Kroner, Head, Science Department, Teaneck High School, Teaneck, New Jersey:

"Secure economic and professional improvement through the national and local chemical organizations."

Albert J. Kroner

By Dr. M. L. Crossley, a Research Director, American Cyanamid Company, Bound Brook, New Jersey:

"Know more than chemistry. Seek more in education which fits one to take his place as a representative citizen and to render a high type of service.

By Frederick G. Manwaring, Consultant, Maywood Chemical Works, Maywood, New Jersey:

"Cultivate the ability to get along with and to cooperate enthusiastically with fellow workers."

Norris R. Kosches

By Norris R. Kosches, Teacher, Lyndhurst High School, Lyndhurst, New Jersey:

"Select your field of interest and become thoroughly informed in it."

—Hessler Studio

John W. McBurney

Dr. Stewart J. Lloyd

By Dr. Stewart J. Lloyd, Dean of School of Chemistry, Metallurgy, and Ceramics, University of Alabama, University, Alabama:

"Use your chemical training as a background for business as lawyers do with theirs. Only the geniuses and the drones should actually practice chemistry as such."

By John W. McBurney, Technologist, National Bureau of Standards, Washington 25, D. C.:

"I would advise a young chemist to get some other title, say physicist or some kind of engineer. A knowledge of chemistry is useful, but don't be classified as one. For example, see my own biography in *Who's Who in America!*"

By Dr. Norris W. Matthews, Chemist, Applied Research Laboratory, U. S. Industrial Chemicals, Inc., P. O. Box 1956, Baltimore 3, Md.:

"Besides their studies, I would by all means suggest that they join a professional organization such as The American Institute of Chemists."

Norris W. Matthews

By Francis G. Rawling, Process Consultant, West Virginia Pulp and Paper Company, 270 Park Avenue, New York, N. Y.:

"If employed by industrial organizations to become acquainted with the operation of the plant; to find out how a process operates so that suggested improvements can have a solid basis of facts; to take pride in good work."

M. Starr Nichols

By Dr. M. Starr Nichols, Chemist, State Laboratory of Hygiene; Professor of Sanitary Chemistry and Lecturer in Sanitary Engineering, University of Wisconsin, Madison, Wis.:

"Learn fundamentals, especially in electronics, mathematics, and chemistry, especially organic, physical, and biological. Develop a personality to live with others. Try to forget self. Most chemists are hermits. I would suggest civic activities as a development procedure. Chemists should be agreeable socially to their friends and family. Bridge (contract) is nearly a 'must' in our evening contacts. Talk a little shop outside your laboratory. Love your work primarily because it is your life, and usually material compensation will follow your efforts."

Albert P. Sachs

By Albert P. Sachs, Consulting Chemist and Chemical Engineer, 314 West 100th Street, New York 25, New York:

"To take graduate work in the borderline and allied sciences(catalysis, nuclear physics, crystallography, etc.)."

By George E. Merkle, Vice President and General Manager, Fiske Brothers Refining Company, 129 Lockwood Street, Newark, N. J.:

"Good chemists are on a par with untrained beginners as regards wages. Chemists should require more chemical courses in colleges and less mechanical drawing in the first years of the courses. It is about time that chemists were rated as professional and above the building trades or accountants which do not require the expensive and long training."

By Nathan Smith, Pharmaceutical Consultant, 4115 76th Street, Jackson Heights, L.I., New York:

"A large number of industries employ chemists today which twenty-five years ago identified chemistry with non-essential 'pill mixing'; therefore, my advice to the young chemist is, 'specialize as much as possible in a certain particular field of the profession'."

Nathan Smith

By A. J. Pastene, Plant Manager, Monsanto Chemical Company, J. F. Queeny Plant, 1700 South 2nd Street, St. Louis 4, Missouri:

"Times for young chemists are relatively easy now, but they should not be fooled thereby, but work to the best of their capacity."

Florence E. Wall

By Miss Florence E. Wall, Consultant (general technical writing; specialty, cosmetics and cosmetology), New York, N. Y.

"To know thoroughly whatever chemistry they are supposed to know, and something of its place and significance in the history of science; then not to live with this as an end in itself, but to develop professional and social consciousness and utilize knowledge and ability to best advantage of the community as well as of themselves."

By Professor Alfred M. Peter, Emeritus Professor of Soil Technology, University of Kentucky, Lexington 29, Kentucky:

"Specialize in something in which they are particularly interested."

By Charles F. Smith, Jr., Assistant Sales Manager, U. S. Rubber Reclaiming Company, Inc., 500 Fifth Avenue, New York 18, N. Y.:

"Take an active part in civic, lodge church, and society affairs. Learn to 'win friends and influence people.' Regard earnings as a measure of success and insist on receiving proper recognition. Build respect for yourself and your profession in the minds of your employers and your associates."

By Edward G. Williams, Consulting, Industrial and Engineering Chemist, The Edward G. Williams Laboratories, 933 Poydras Street, New Orleans, Louisiana:

"Take a position with the U. S. Government Department of Agriculture or Bureau of Mines."

By R. A. Worley (retired), 723 Hamilton Avenue, Trenton 9, N. J.:

"Make as many contacts as possible with members of the profession. Take an active part in the civic affairs of your community."

By James N. Taylor (retired), 112 W. South Street, Smyrna, Del.:

"To strive to become better versed in our science; to seek greater social and economic intelligence; to cultivate spiritual perception."

By M. G. Weber, Consulting Chemist, 551 Prospect Street, Maplewood, New Jersey:

"Before specializing obtain a good general chemical foundation. In chemistry always consider the national interest of the United States first; only free science means progress."

Petition Filed

A petition for a writ of prohibition has been filed in the Supreme Court of Ohio against Harold I. Covault, Joseph A. Vjhelyi, Clifford G. Strean and James B. Seward, constituting the Board of Elections of Lorain County, Ohio, seeking to prevent the placing of the name of Robert James Lowder as candidate for the office of County Engineer of Lorain County, Ohio, on the ballots for the general election to be held next November, on the ground that Lowder is not a registered professional engineer and surveyor as required by Sec. 2783, Ohio General Code.

The petition was filed in the name of the State of Ohio by Dr. E. L. Luaces, F.A.I.C., chairman of the Committee on Grievances and Ethics of The Ohio Society of Professional Engineers, and Don E. Patterson and Lester W. Osborne, members of the O.S.P.E. from Lorain County.

Dr. Parsons Awarded Honorary A.I.C. Membership

Dr. Charles L. Parsons, for many years secretary of the American Chemical Society, will be presented with Honorary Membership in The American Institute of Chemists, at a joint meeting of the New York Chapter, A.I.C., and the New York Section of the American Chemical Society, October 20, 1948.

The dinner meeting will be held in the Downtown Athletic Club, 18 West Street, New York, N. Y., at seven p. m. Speakers include Dr. Martin Meyer, chairman, New York Chapter, A.I.C., Dr. Donald B. Keyes, vice president in charge of research and development, Heyden Chemical Corporation; Lawrence H. Flett, president, A.I.C., Dr. Clifford F. Rassweiler, chairman, New York Section, A.C.S., and Dr. Walter J. Murphy, editor, *Chemical and Engineering News*.

Dr. Maurice J. Kelley, Nopco Chemical Company, Harrison, New Jersey, is in charge of reservations for the dinner.

National Chemical Exposition

The Fifth National Chemical Exposition, to be held October 12th through 16th at the Coliseum in Chicago, will include the revival of the National Chemical Conference, which was not held at the Exposition in 1946. The Chicago section of the American Chemical Society, sponsor of the Expositions, announces that this conference will feature noted speakers on new developments, discoveries, and applications in industrial chemistry. The Technical Bureau will be in charge of Dr. Ward V. Evans, professor of chemistry, Loyola University.

Food Industry Urged to Consider Vitamins

Dr. Bernard L. Oser, F.A.I.C., director of Food Research Laboratories, Long Island City, New York, addressed the New York section of the Institute of Food Technologists, April 14th, on "A New Look at Vitamins in Foods."

To improve the nutritional status of the nation, he urged the food industry to take the initiative in the preparation and adoption of vitamin standards and controls, and in formulating the basic principles governing food fortification programs.

Re-elected President

Dr. Gustav Egloff, F.A.I.C., has been re-elected to the presidency of the Chicago Technical Societies Council, to serve for the year 1948-49.

Communications

Austria Needs Technical Literature

To The A.I.C.:

American scientists, including myself, have been very lax in understanding the need for scientific literature in the war-ravaged countries of Europe. In my own case, rather than try to store my journals, and not having anyone immediately handy to give them to, I have been destroying many of them. This is probably true of many of the technical people in the United States.

I have now seen what it would mean to the European people, if they could receive this literature, particularly in Austria, where I visited recently to attend the Fiftieth Anniversary Meeting of the Austrian Chemical Society at Vienna.

Many of the libraries in Austria have either been destroyed or dispersed. Technical literature was not available during the war, and it is only returning very slowly now because of the usual differences of foreign exchange and world shortages. The United States Information Center has accumulated a small technical library and it receives quite a good selection of current technical journals but usually one copy of each. In many instances this is the only copy of the journal in Austria. It takes little imagination to visualize what this means to research workers and teachers there.

All of us know the past contributions of the Austrian scientists. They can and will contribute much more in the future. Right now they need technical literature of all kinds, standard works for reference and teaching and current literature for research background.

I want to appeal to everyone to do something, no matter how little to help out on this problem. If you know an Austrian technical man, take out a subscription for him to some journal in which he is interested. If you do not know anyone personally, send a journal to one of the Universities or Technical High School libraries. If you cannot do this, send your own journals after you are through with them. Clean out all those old college textbooks you never look at. If you have books in German, so much the better, but a high percentage of the technically trained people read English, so send anything you have.

If you do not have private addresses to which you can send literature, anything that you can spare should be sent either directly to: Miss Theresa Druml, U. S. Information Center, Vienna 1, Kaerntnerstrasse 38, Austria; or to, the Information Center,

H. Q. USFA—ISB APO 777, c/o P. M., N. Y., N. Y. Attention: Miss Theresa Druml.

On Aid to N. Y. Municipal Chemists

To the Editor:

Concerning Mr. Janer's remarks in the April issue of THE CHEMIST, my comment on the INSTITUTE'S activities in behalf of the New York Municipal chemists had to do not with unionism in general, but with those INSTITUTE activities suggesting unionism.

I believe that the salary levels proposed by the Municipal Chemists' Association on page 150 of the April issue of THE CHEMIST are entirely reasonable. I do not believe there is even a slight hope of attaining them through "the education of the city as an employer." The education of any corporation, either municipal or privately owned, is a singularly difficult task. As an example, the Buffalo Teachers Association and the Sanitation Workers Association undertook similar educational activities in Buffalo with noteworthy lack of success . . . Mr. Janer confirms the statement that many are helpless victims of the situation. While the same is probably true of the majority of the world's population, as chemists we should more actively aid other chemists. Professionally this can be accomplished only by accenting the positive as suggested in my March communication.

I have perhaps given Mr. Janer the unfortunate impression that I am opposed to INSTITUTE aid to the Municipal Chemists' program. Actually I am opposed only to the ineffectual and inadequate form that aid has taken.

—Frederic Sievenpiper, F.A.I.C.

Chemical Institute Elections

The Chemical Institute of Canada announces that it has elected the following new officers for 1948-49: President, Mr. T. W. Smith, F.C.I.C., Canadian Industries Limited, P. O. Box 10, Montreal, Quebec; Vice-President, Dr. E. W. R. Steacie, F.C.I.C., National Research Council, Ottawa, Canada; Chairman of the Board of Directors, Mr. Eric B. Lusby, F.C.I.C., c/o Imperial Oil Limited, Sarnia, Ontario; and Treasurer, Mr. J. Charles Honey, F.C.I.C., c/o Canadian Johns-Manville Company, Ltd., 199 Bay Street, Toronto 1, Ontario.

Bernstein to Illinois Institute of Technology

Dr. Richard B. Bernstein, A.A.I.C., has been appointed assistant professor of chemistry at Illinois Institute of Technology, Chicago 16, Illinois, effective September first. He received the Ph.D. degree in June from Columbia University where he was a faculty member and research worker.

Necrology

Frank O. Clements

Dr. Frank Orville Clements, 111 North West Street, Westerville, Ohio, died May 8, 1948 in his seventy-fifth year.

Dr. Clements was born in Westerville, Ohio, and obtained the A.B, M.A. and Sc.D. degrees from Otterbein College, and the M.Sc. degree from Ohio State University in 1899.

He was assistant chemist for the Pennsylvania Railroad from 1899-1903; principal assistant chemist for the Union Pacific Railroad from 1903-1905; chief chemist and engineer of tests for the National Cash Register Company, 1905-1916; and technical director of the Research Laboratories of Dayton Metal Products from 1916-1920. In 1920 he joined General Motors Corporation as technical director of the research laboratories until his recent retirement.

Dr. Clements belonged to a number of associations including the American Chemical Society, American Society for Testing Materials, the American Association for the Advancement of Science, The American Society of Metals, the Electro-chemical Society, The Institute of Metals, The Society of Automotive Engineers, The Engineers Society of Detroit, and the Dayton Engineers Club. He became a Fellow of THE AMERICAN INSTITUTE OF CHEMISTS in 1938.

Ralph M. Conrad

Dr. Ralph M. Conrad, director of the Bureau of Industrial Research, University of Denver, Denver, Colorado, lost his life in a boating accident on May 22, 1948, at the age of thirty-six.

Dr. Conrad was born in Kansas, and received the B.S. degree from Kansas State College, and the M.S. and Ph.D. degrees from the State University of Iowa. From 1933 to 1936, he was a graduate assistant at the State University of Iowa; from 1936 to 1946, he was assistant and associate professor at Kansas State College. In 1946 he became professor and director of the Bureau of Industrial Research of the University of Denver. During the late war he served as expert consultant and advisor to the Quartermaster Food and Container Institute.

Dr. Conrad specialized in biochemistry, especially its application to the food industry. He was the author of more than twenty journal articles and other technical material.

He became a Fellow of the AMERICAN INSTITUTE OF CHEMISTS in April, 1948.

Henry C. Frey

Henry C. Frey, vice president, Patek Brothers, Inc., 226 North Water Street, Milwaukee, Wisconsin, died June 2, 1948, at his home in Milwaukee at the age of sixty-two.

He was born in Philadelphia, Pennsylvania, and educated at Temple University.

From 1906 to 1909, he was control and research chemist for N. Z. Graves Company, Philadelphia; from 1909 to 1911, chemist and assistant superintendent of the Color Factory, Detroit White Lead Works, Detroit, Michigan; and from 1911 to 1913, chemist and assistant superintendent of Moline Paint Manufacturing Company, Moline, Illinois. In 1913 he joined Patek Brothers, Inc., where he supervised production and research development, later becoming vice president.

He specialized in paints, varnishes, lacquers, and general protective coatings, and had published several articles in this field.

He was a member of a number of societies including the American Chemical Society, American Society for Testing Materials, The Engineers' Society of Milwaukee, The City Club and the Athletic Club of Milwaukee. He was a 32nd degree Mason and a member of the Shrine.

He became a Fellow of THE AMERICAN INSTITUTE OF CHEMISTS in April, 1938.

National Industrial Chemical Conference

Dr. Charles L. Thomas, F.A.I.C., chairman of the Chicago Section of the American Chemical Society, announces that the program of the National Industrial Chemical Conference will run concurrently with the National Chemical Exposition. Both are to be held at the Chicago Coliseum, October 12th to 16th. Eighteen speakers will discuss such topics as "Chemical Markets," "Chemistry in General Industry," "Hazards from Chemicals," "Management of Research," "Frontiers of Chemistry," and "Pilot Plant Use by the Chemical Industry."

A Technical Bureau is a newly created service to be given at the National Chemical Exposition. Dr. Ward V. Evans, professor of chemistry, Loyola University, will be in charge of this service to business men and manufacturers who seek knowledge of how the chemical industry can help them with their problems.

Dunning Presents Memorial

Dr. H. A. B. Dunning, F.A.I.C., former president of the American Pharmaceutical Association, recently donated a flagstaff with base of bronze and marble, as a national memorial to "all pharmacists who served in the wars of our country," The flagstaff was erected on the grounds of the Association's building in Washington, D. C.

COUNCIL

OFFICERS

President, Lawrence H. Flett
Vice-president, Raymond E. Kirk
Secretary, Lloyd Van Doren
Treasurer, Frederick A. Hessel

COUNCILORS

M. J. Bahnsen, *Ohio Chapter*
M. L. Crossley, *At-Large*
Gustav Egloff, *Past President*
Karl M. Herstein, *New York Chapter*
Lester F. Hoyt, *Niagara Chapter*
Donald B. Keyes, *At-Large*
R. H. Kienle, *At-Large*
Harold A. Levey, *Louisiana Chapter*
H. W. Mackinney, *New Jersey Chapter*
J. M. McIlvain, *At-Large*
C. P. Neidig, *At-Large*
E. H. Northey, *At-Large*
L. F. Pierce, *Los Angeles Chapter*
Donald Price, *At-Large*
Charles W. Rivise, *Pennsylvania Chapter*
Royal E. Rostenbach, *Washington Chapter*
Maurice Siegel, *Baltimore Chapter*
Foster D. Snell, *Past President*
Charles L. Thomas, *Chicago Chapter*
James R. Withrow, *At-Large*
Lincoln T. Work, *At-Large*

Council Meeting Dates

Meetings of the National Council of THE AMERICAN INSTITUTE OF CHEMISTS are scheduled to be held at 6:00 p. m. at The Chemists' Club, 52 East 41st Street, New York 17, N. Y., on the following dates: September 8, 1948; October 13, 1948; November 10, 1948; December 8, 1948.

Chapters

Baltimore Chapter 1947-1948

Annual Report

THE chapter met in August to outline the plans for the ensuing year.

The first of our regular meetings was held on October 15th, at Loyola College, where Dr. H. W. Kuhl of McCormick Company gave a talk on "Flavoring Materials."

On November 19th, the chapter visited Hynson-Westcott & Dunning plant, pharmaceutical chemists, in the afternoon. In the evening, after dinner at the Stafford Hotel, Dr. P. Reid of the same company gave a talk on "Penicillin."

On March 17th, the chapter visited the H. B. Davis Company, paint and varnish manufacturing plant, which tour was followed by a light supper served at the plant, then a talk by Dr. W. T. Pearce of John Hopkins University who spoke on "The Chemists' Place in Industry."

On April 6th, the chapter met at Loyola College to hear an address by Dr. Johan Bjorksten on, "Experiences in Consulting Work and Recent Trends in Plastics."

All of our meetings, to date have been attended by forty or more persons of the fifty-five making up our membership. In May we plan to have dinner and annual business meeting which will wind up our year.

—R. W. Lamenzo
Chairman.

Chicago Chapter 1947-1948

Annual Report

Meetings of the Chapter Council were held June fifth and September 30th at the Furniture Club, to effect organization for the 1947-1948 year and to carry out other Chapter business. The following were selected as chairmen of the various committees:

Certification and Licensing of Chemists, Joseph Zichis.
Contracts, Vanderveer Voorhees.
Economic Status of Chemists, R. J. Gnaedinger.
House, G. T. Tobiasson.
Legislation affecting Chemists, H. N. Vagenius.
Membership, R. F. Baldaste.
Program, B. W. Beadle.
Public Relations, A. B. Cramer.
Student Awards, V. I. Komarewsky.
Arrangements Committee, 1947 *Honor Scroll Award,* Bruce M. Bare.

Selection Committee, 1948 *Honor Scroll Award,* Bruce M. Bare.

Preparation of Honor Scroll, F. B. Burns.

The annual Honor Scroll Award was made to E. H. Volwiler, executive vice president, Abbott Laboratories, at a dinner meeting on Friday, October tenth. Talks made at this meeting were as follows:

"My Friend Ernest Volwiler," by Robert E. Wilson, Chairman of the board, Standard Oil Company (Indiana).

"E. H. Volwiler—Investigator, Editor and Executive," by A. E. Sidwell, Jr., director, Chemical Laboratories, AMA.

"Better Health Through Science," by E. H. Volwiler.

A meeting on June twelfth at the Electric Club consisted of a panel discussion of the question "What Chemists and Industry Expect of Each Other." R. F. Baldaste, personnel director of the Whiting Laboratories of the Standard Oil Company (Indiana), discussed "What Management Expects of its Technical Employees." R. K. Summerbell, head of the chemistry department, Northwestern University, told how the chemist selects his job, and what the university finds the employer expects from the chemist. A. B. Cramer, F & F Laboratories, approached the subject from the view of the employed chemist, giving an outline of what the chemist would like to find in his job.

On February third a council meeting was held to discuss routine business, and particularly the program to be sponsored by the AIC at the science panel sessions held in connection with the Production Show of the Chicago Technical Societies Council. A March 24th program under the chairmanship of Johan Bjorksten included talks on the following:

L. F. Yntema, Fansteel Metallurgical Company, "The Influence of the Technical Man on Development."

Clyde Crowley, Graham Crowley Associates, "The Influence of the Technical Man in Society as a Consultant to Industry."

Otto Eisenschiml, Scientific Oil Compounding Company, "The Influence of the Technical Man in the Community."

On February thirteenth a Chapter meeting was held at the Electric Club. It had as its subject "Professional Training for Chemical Management." The speakers were H. E. Robinson, assistant director of research for Swift and Company; George Gelman, technical director of the Quartermaster Food and Container Institute of the Armed Forces; and George S. Speer, director of the Institute for Psychological Services, at Illinois Institute of Technology.

The meeting on April second, also

held at the Electric Club, had as its subject "The Chemist's Wife." Subjects discussed by the various speakers were as follows:

Sylvia Kramer, Marcelle Cosmetics, "The Role of Women in Chemistry."

H. S. Bloch, Universal Oil Products Company, "What the Industrial Research Chemist Expects of His Wife."

Mrs. H. S. Bloch, "What the Chemist's Wife Faces."

James H. Sample, Sherman-Williams Company, "Special Problems."

An additional meeting is scheduled for May 14th. A business meeting will be held in June, to permit full discussion of committee reports.

Other Chapter offices held during the year are the following:

Representatives on Chicago Technical Societies Council:
Johan Bjorksten
M. J. Hiler

Alternates:
William Harber
Charles L. Thomas

Reporter for THE CHEMIST:
Madge M. Spiegler

Charles L. Thomas was appointed representative to the National Council to take the place of Martin de Simo, who has moved from Chicago.

It is felt that inadequate attention was given this year to several items of INSTITUTE business, particularly the important matter of membership. This was due in part to the slowness in getting started that always seems to result from the current method of organizing each year's program. An amendment has been proposed to the Chapter Bylaws providing for election of a chairman-elect, so that committee organization for the coming year can be largely out of the way before the new chairman takes office.

—Edward L. Gordy,
Chairman.

April Meeting

The time spent by the chemist in reading chemical journals presents a problem for the chemist's wife. This problem was charmingly presented by Mrs. Herman S. Bloch at the meeting of the Chicago Chapter, held on April second.

This topic, "The Chemist's Wife," was the third in a series of panel discussions on the general topic, "What is a Chemist." Dr. Sylvia Kramer, of Marcelle Cosmetics, Inc., gave the woman chemist's view of the subject and brought out, in an interesting fashion, the difference between men and woman shoppers—shopping taking a great deal of a woman's time.

Dr. J. H. Sample, Sherwin-Williams Company, and Dr Herman S. Bloch, Universal Oil Products Company, discussed the useful part played by the chemist's wife and the many

little problems that arise in the chemist's daily life.

This comparison of the problems encountered by a chemist and his wife provided a very entertaining evening for the Chapter.

New Officers

Chairman, Dr. J. A. Bjorksten

Vice Chairman, Dr. Herman S. Bloch

Secretary-treasurer,

Mary L. Alexander
Universal Oil Products Company
310 South Michigan Avenue
Chicago. Illinois

Council Representative,
Dr. Charles L. Thomas

Reporter to The Chemist,
Madge M. Spiegler

May Meeting

"Industry Goes to School" was the topic for discussion when the Chicago Chapter met on May fourteenth. The subject was presented by Mr. J. Manczyk, director of education for the Production Division, Joseph E. Seagram and Sons, Inc. Mr. Manczyk's talk was followed by an active period of discussion in which many interesting points were brought out on the subject of education in the industrial plant. (For an abstract of "Industry Goes to School," see page 405.)

Los Angeles Chapter 1947-1948

Annual Report

DURING the season 1947-1948, the Los Angeles Chapter has held bi-monthly meetings with the average attendance somewhat larger than that of the previous year.

As a result of Dr. Egloff's talk at the October 24, 1947 meeting, an intense interest in the AIC was initiated, resulting in the acquisition of thirteen new fellows and members and one by transfer.

Our past Chairman, Raymond J. Abernethy, presented a review of the professional problems of the chemical profession, in a discussion on licensing and registration at the February meeting of the American Chemical Society.

Several of the newly acquired fellows and members represent the outstanding local colleges and universities, and their interest will be communicated to the student bodies, the local level of the beginning of a professional program.

With the licensing of chemical engineers in California now an actuality, the Los Angeles Chapter is actively cooperating with the American Chemical Society in preparing for proper licensing of chemists if this should occur.

The local chapter has been saddened by the untimely death of our

Treasurer and long-time Fellow, Edwin B. Henderson.

With our larger and enthusiastic membership, we are planning an expanded, diversified program and an intensive drive to add the best professional elements of the local chemical fraternity to our rolls.

—Dr. Albert Salathe
Chairman.

New Jersey Chapter 1947-1948

Annual Report

THE New Jersey Chapter ended its 1947 season last June with a trip through the plant of the Hoffman-La Roche Company, Nutley, N. J. It plans to make a plant trip, limited to members of the INSTITUTE, an annual event; this June, 1948, the Calco plant, Bound Brook, N. J. will be visited.

At the first meeting of the current season, December 15, 1947, Dr. Harry L. Fisher, U. S. Industrial Chemicals, gave a most interesting talk on "Synthetic Rubbers—Present and Future." The second meeting was a joint one with the North Jersey Section of the A.C.S. and the Technical Societies Council of New Jersey. Dr. Frank B. Jewett, past president of the Bell Telephone Laboratories, spoke on "Research and Government."

Our meetings are arranged so as to avoid conflict with those of the New York Chapter; the two chapters invite each other's members to all meetings. Drs. William Sparks, Gordon Whitcomb and Paul Giesy served as the Program Committee.

The small sub-group organized informally as a gathering for friendly discussion met several times during the year in the library of the Montclair Research Corporation. Another group in the Oranges, is being started by Dr. H. W. Mackinney of Bakelite.

The Chapter treasury is in good condition and owes thanks to the Chemical Publishing Company for sending out notices free of charge and to the Public Service Corporation for use of the auditorium in Newark.

Messrs. Harry Burrell and J. B. Rust were secretary and treasurer, respectively, of the chapter. Dr. Ralph Charlton was vice-chairman and Dr. George Royer representative to the National Council.

—Dr. Paul Allen, Jr.
Chairman

Niagara Chapter 1947-1948

Annual Report

At the meeting on June 4th, 1947, the following officers for 1947-1948 were elected:

Chairman,
C. E. Entemann

Vice-Chairman,
James Ogilvie
Secretary-Treasurer,
James J. Pallace, S. J.
Chapter Representative,
Frank Mitchell
Delegate to T. S. C.
Lothar Sontag

At the same meeting Dr. Louis Kress, director of Roswell Park Memorial Institute in Buffalo spoke on "Chemistry the Ally of Cancer Control."

October 1st, 1947, Dr. Alexander Schwarcman, research director and director of the Spencer Kellogg & Sons Company, spoke on "Wartime Contributions of American Chemists to Drying Oils and Edible Oils."

December 3rd, 1947, H. Emmett Brown, head of science department, Buffalo State Teachers College, spoke on "How Industry and Education Can Cooperate to Train Chemists."

February 4th, 1948, Lieutenant Colonel Harland C. Woods, Office of United States Military Engineers, spoke on "The Role of the Chemist in Civic Life."

April 7th, 1948, Joseph G. Hoffman, Ph.D., director of cancer research, Roswell Park Memorial Institute, spoke on "Radioisotopes in Cancer Research."

—James J. Pallace, S. J.
Secretary

Northern Ohio Chapter 1947-1948

Annual Report

OUR first business meeting was held in October at the Hotel Carter in Cleveland.

In December we had a joint meeting with the Cleveland Section of the American Chemical Society.

At our February meeting, which was held in the Chemical Building of Case School of Applied Science, Mr. J. P. Coleman of Dayton was the speaker.

On April fifth, we had a meeting in Akron, when forty members and guests were present at "Iacominis," known for its fine food. After dinner Mr. Dean S. Owens of Resinous Products Company spoke on the "Recent Trend in Plasticizers in Polyvinyl Chloride."

In June we will have a business meeting at the estate of our Secretary-Treasurer, Mr. Paul Hofmann in Bay Village at the lake.

The chapter has approximately fifty-five members and is growing gradually, but due to the large territory we cover it has been a task to have a large attendance during inclement weather.

The chairman wishes to express his appreciation for the excellent cooperation and work done by the officers and members.

—Henry F. Frank
Chairman.

Pennsylvania Chapter 1947-1948

Annual Report

DURING the 1947-1948 season the Pennsylvania Chapter held four technical and professional meetings at the Engineers' Club of Philadelphia. All were preceded by an informal dinner. A list of the speakers and topics follows:

October 2, 1947—Dr. James C. Winters, technical representative, The Resinous Products and Chemical Company, "Ion Exchange Resins and Their Applications."

November 6, 1947—Dr. Foster D. Snell, president, A.I.C., "The Present Status of The American Institute of Chemists." Mr. Morton L. Bachman, assistant manager, Industrial Council, Chamber of Commerce of Philadelphia, "The Chemical Industry in Philadelphia."

February 5, 1948—Mr. Charles W. Rivise, Caesar & Rivise, Philadelphia, Pa., and Dr. Joseph Rossman, patent counsel for the Marathon Paper Mills, "What the Chemist Should Know About Patents."

April 1, 1948—Dr. Edward H. Cox, professor of chemistry, Swarthmore College; Dr. Sidney Weinhouse, member of the staff, Research Institute, Temple University; Mr. John M. McIlvain, director of the Administrative Division, Research and Development Department, The Atlantic Refining Company, and Dr. Edward L. Haenisch, head, Chemistry Department, Villanova College, "A Symposium on Research and Development."

The average attendance at dinner was twenty, and at the meetings, thirty five.

The following committees served during the past year:

Executive Committee: Dr. Glen W. Hedrick, Mr. John H. Staub, Mr. John M. McIlvain, Dr. Francis C. Huber, Dr. Helmuth Pfluger, and Mr. Kenneth E. Shull (Chairman).

Program Committee: Dr. Alex. Keller, Dr. Martin Culver, Dr. Ralph Cornwell, Dr. Warner Linfield, and Dr. Glen Hedrick (Chairman).

Activities Committee: Mr. Harold A. Heiligman, Mr. Addison C. Angus, Dr. Arthur Osol, Dr. Glenn Ullyot, and John M. McIlvain (Chairman).

Attendance Committee: Mr. Benjamin Levitt, Mr. Charles Rivise, Dr. James Couch, Dr. A. B. Sample, and Dr. Helmuth Pfluger (Chairman)

Dinner and Hospitality Committee: Dr. T. W. Riener, Mr. John Dittmar, and Mr. Hillary Robinette, Jr. (Chairman).

Membership Committee: Mr. James E. Heckel, Mr. Marcus Sittenfield, Mr. Ronald J. Baird, Mr. John Jehle, Mr. John Moore, and Dr. Francis C. Huber (Chairman).

Student Contact Committee: Dr. Joseph W.E. Harrisson, Mr. Thomas R. Foltz, Mr. Linwood Tice, and Dr. Walter Obold (Chairman).

The Executive Committee met twice during the year to transact Chapter business.

As in the past, the Pennsylvania Chapter was represented on the Philadelphia Technical Service Council. This year our representative, Mr. John H. Staub, was selected to serve on the Philadelphia Technical Service Committee. This committee is the operating committee of the Council and it directs the activities of the Employment Bureau.

Ballots were sent to the membership following the Nominating Committee's report at the April first meeting. Results of the election have not been tabulated at this writing.

—Kenneth E. Shull
Chairman.

Washington D. C. Chapter 1947-1948

Annual Report

THE meeting on May 20, 1947, signified the closing of the old and the opening of the new business year. After the election of officers, John H. Teeter, staff assistant to the Majority Policy Committee, U. S. Senate, described the status of the legislation for the establishment of a National Science Foundation.

The following four regular meetings were held:

September 24, 1947: Jack C. Morris, patent adviser, Office of Rubber Reserve, R F C, on "Rights and Duties Involved in Inventions and Patents."

October 22, 1947: James G. Vail, vice president, Philadelphia Quartz Company, on "The Profession of Chemist in the Light of History."

January 30, 1948: Robert S. Aries, adjunct professor, Brooklyn Polytechnic Institute, on "Lives and Jobs of Chemists in France."

February 27, 1948: Charles Proffer Saylor, chemical microscopist, National Bureau of Standards, on "Chemical Mysteries of Polarized Light."

The Annual meeting in May will celebrate, in a modest way, the twenty-fifth anniversary of the Chapter.

The story of this Chapter was told in the October, 1947, issue of THE CHEMIST.

—Dr. Eduard Farber
Chairman.

For Your Library

The Interpretation of Spectra

By William Mayo Venable. Reinhold Publishing Corporation. 1948. *V*—200 *pp. Price* $6.00.

This book consists of a great number of spectral line measurements, a comparison of these measurements with other reliable measurements, and an attempt to correlate the statistical data into a working hypothesis free from arbitrary assumptions. The validity of the quantum hypothesis of Planck as presented by its founder is fully recognized. Its generalization by others to include all radiation phenomena is not accepted, which is quite in keeping with the last remarks of H. A. Lorentz, published posthumously in the *Journal of The Franklin Institute* (1928), that the theory of light quanta fails signally to account for the simplest interference phenomena from a feeble light source.

Venable's idea of spectral lines caused by the interaction of subatomic particles, and the infinite possibilities which this gives rise to under sufficiently drastic means of excitation, is not altogether foreign to the recent results of atomic subdivision caused by cyclotrons at different energy levels. This book is suitable for advanced workers in spectrometry who have an open mind and who are not satisfied with the mathematical devices of wave mechanics or matrix mechanics as an explanation of how atoms radiate. The most we can gain from any of the theories of spectral structure is an accounting for some phenomena of radiation but not for all.

—Dr. E. E. Butterfield, F.A.I.C.

Manual for Process Engineering Calculations

By Loyal Clarke. Chemical Engineering Series. McGraw-Hill Book Company, 1947. 438 *pp.* 6½" *x* 9". $6.00.

This is a condensed handbook which has the advantages of simple and direct approach to problems, together with the disadvantage of oversimplification and elimination of pertinent data in some cases. In the tables on corrosion of common metals, for instance, copper is ignored. Thermodynamic data, flow of fluids, pumps and heat transfer, power, and water are well presented. Absorption and distillation are treated in a separate chapter. The many nomographs lend themselves well to photostatic enlargement for pratical use.

——Dr. J. A. Steffens, F.A.I.C.

The Chemical Formulary

Vol. VIII. Edited by H. Bennett. Chemical Publishing Company, Inc. 448*pp.* 5½" *x* 8½". $7.00

This is the eighth volume in a series. Each volume contains different formulae for the products given. The

present book includes formulae for adhesives, cosmetics, drug products, emulsions, farm and garden preparations, food products, inks, insecticides, fungicides and weed killers, leather treating preparations, lubricants and oils, construction materials, metal treatments, paint, varnish, lacquer, paper, photography, plastics, rubber, resins, waxes, polishes, pyrotechnics and explosives, soaps and cleaners, textiles, and miscellaneous other products.

A list of trade-name chemicals and the names of companies from which they can be obtained is given. An introductory chapter gives general directions and advice for the benefit of students or those unfamiliar with chemical compounding. Tables and general information are also included.

Those who have preceding volumes of *The Chemical Formulary* will want to add this one to increase the number of formulae available to them. Those who are not acquainted with the series may find this book interesting because, as the editor of the series states, "Formulae are useful as starting points from which to work out one's own ideas. Formulae very often give us ideas which may help us in our specific problems."

V.F.K.

Wanted

Decennial Index of *Chemical Abstracts* sought. Please reply to Box 94, THE CHEMIST.

Books Announced

"Industrial Electric Furnaces and Appliances". Volume 2. By V. Paschkis. 242 pp. ill. 6"x9" $6.00. Interscience Publishers, Inc., 215 Fourth Ave., New York 3, N. Y.

"The Ceramic Art of China and Other Countries of the Far East." 456 pp. 10¼" x 8". 3 color plates. 380 illustrations. Bibliographies. Index Map. $25.00. Anglobooks, 475 Fifth Avenue, New York 17, N. Y.

"Business-Man's Atlas of the United States." Easy-reference atlas. $12.50. The George F. Cram Company, Inc., 730 East Washington Street, Indianapolis 7, Indiana.

"Traite de Chimie Analytique Qualitative Minerale." By Paul E. Wenger, Dr. es Sc., Roger Duckert, Dr. es Sc., and Yvonne Rusconi. Librarie de L'Universite Georg & Cie. S. A., Geneve, Switzerland. Inquiries may be directed to Albert J. Phiebig, 545 Fifth Avenue, Suite 906, New York 17, N. Y.

"An Introduction to Color," by Ralph M. Evans of Eastman Kodak Company. Illustrated. $6.00. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y.

"The Naturalists' Directory." 35th edition (1948). Price $3.00. The Cassino Press, Salem, Mass.

"Mitteilungen Aus Dem Institut Fur Organische Chemie. III" by Erik Larsson. Transactions of Chalmers University of Technology, Gothenburg, Sweden. Nr. 59, 1947.

"Zur Kenntnis Der Rostbildung Des Eisens" by Yrjo Kauko. Transactions of Chalmers University of Technology, Gothenburg, Sweden Nr. 61, 1947.

"A Source Book on Foods." By Ora Blanche Burright, A.B., M.S., M.A., F.A.I.C. 14 Chapters. 275 pp. 8½" x 11". Tables. Charts. $4.50. The Pioneer Woman Publishing Company, 1222 South Fourth Street, Ponca City, Oklahoma.

"A Catalogue of Books No. 142. 1948." Catalogue includes books on old science. Suckling and Company, 13, Garrick Street, London, W. C. 2, England.

"E. J. Brill's Book List." Leaflet on chemistry books. E. J. Brill, Publisher and Bookseller, Leiden, Holland.

"Rare Books" Catalogue No. 7. 1948. H. A. Feisenberger 11A, Duke Street, Manchester Square, London, W. 1, England.

"Spring 1948 List." Catalog of books on plant science. "List 5," recent biological and agricultural books published in North America or Abroad. Available from the Chronica Botanica Company, Waltham, Mass.

Booklets

"Hunter Continuous Recorders for Gloss and Reflectance" and "Hunter Color and Color-Difference Meter." Descriptive material available upon request from Henry A. Gardner Laboratory, Inc., 4723 Elm Street, Bethesda 14, Maryland.

"Wool Shrinkage Control with Lanaset Resin, revised edition 1948" Textile Finishing Bulletin No. 112. American Cyanamid Company, Textile Resin Department, Bound Brook, New Jersey.

"Planned Maintenance . . . For Better Results at Controlled Cost," leaflet by Wallace Clark and Company, Management Consultants, 521 Fifth Avenue, New York 17, N. Y.

"Research." Apt quotations from eminent persons. 18-page brochure, illustrated. Laboratory Furniture Company, Inc., 37-18 Northern Boulevard, Long Island City 1, New York.

"The Hard Way and Its Significance," Wilson College Honors Convocation Address by Charles William Hendel, Professor of Moral Philosophy and Metaphysics, Yale University. Wilson College Bulletin, May 1948, Chambersburg, Pennsylvania.

"New No. 40 Circle Template." Information sheet. Rapidesign, Inc., P. O. Box 592. Glendale, Calif.

"Dow Corning Silicone Mold Release Agents for Rubber and Plastics." 16-page pamphlet, illustrated. Dow Corning Corporation, Midland, Michigan.

"Translations of German Research Records from I. G. Farbenindustrie pertaining to Synthetic Organic Chemicals." Catalog of translations. Research Information Service, 509 Fifth Avenue, New York 17, N. Y.

"Gow-Mac Ever-Tite Thermal Conductivity Units for low-cost gas analysis." Descriptive leaflet. The Emil Greiner Co., 161 Sixth Avenue, New York 13, N. Y.

"Trade and Technical Publicity Service." Leaflet describing services and monthly bulletin *Industry Facts*. Available on request to Georgia Lefingwell, Ph.D., 489 Fifth Avenue, New York 17, N. Y.

"Application and Properties of Vat Dyes." Technical Bulletin No. 802. Available from Advertising Department, Calco Chemical Division, American Cyanamid Company, Bound Brook, N. J.

"Occupational Pamphlets: An Annotated Bibliography." By Gertrude Forrester, Ed.D. Contains list of some 2400 pamphlets under job titles conforming to those of the U. S. Employment Service. $2.50. The H. W. Wilson Company, 950-972 University Avenue, New York 52, N. Y.

New Publication

Pyrethrum Post is a new magazine published to spread information about the use of pyrethrum as an insecticide. Volume 1, Number 1, is dated July, 1948, and contains historical background material together with news and recent information. Inquiries should be addressed to The Publishers of Pyrethrum Post, Anglo French House, 2 Queen Anne's Gate, London, S.W.1, England.

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Davis Appointed Manager of New Department

L. L. Davis, Charter member, A.I.C., has been appointed manager of the newly created Development and Research Department of Continental Oil Company, Ponca City, Oklahoma. He has been associated with this company for more than twenty-one years, and prior to his present appointment, he was supervisor of technical services of the Manufacturing Department. Under his guidance, Continental has grown from a one- laboratory organization to a company maintaining nine separate and complete laboratories.

Mr. Davis was born in Partridge, Kansas, and received the M.S. degree in chemical engineering from the University of Washington. His first position was with the Crew-Levick Oil Company as a trainee in refinery operations at Warren, Pennsylvania. He was transferred in 1918 to Tulsa, Oklahoma, as technical assistant to the general superintendent in charge of Cities Service refineries in the Mid-Continent area. After service with Pierce Oil Company, he joined Continental Oil Company's Ponca City refinery in 1927.

He is chairman of Continental's research committee, and a member of the advertising committee and the manufacturing and sales committee.

Dr. Jones Receives Honorary Degree

Dr. Hilton Ira Jones, F.A.I.C., director of Hizone Products Company and Hizone Research Laboratories, Wilmette, Illinois, received the honorary degree of D.Sc. from Dakota Wesleyan University, June first. Dr. Jones, who was graduated with the Ph.D. degree from the University of South Dakota in 1916, was formerly head of the chemistry department at Dakota Wesleyan. He is well-known as a lecturer and he has written many articles for various publications. He contributes a monthly page to the *Rotarian* magazine.

Patents Stimulate New Ideas

John A. Dienner, F.A.I.C., Chicago patent attorney, spoke at the seminar held by NAM's Patents and Research Committee under the sponsorship of the Associated Industries of Cleveland, Ohio, June 21st. His subject was "The Role of Patents in Our Economy."

"While the Constitutional provision speaks of promoting the progress of science and useful arts," Mr. Dienner stated, "it did not until later become generally realized that the recognition of a property right in an invention was a major stroke of statecraft. Instead of being merely a recognition of the rights of inventors to a reward for their inventions, it turned out to be a powerful stimulant to the production of new ideas."

Los Angeles Chapter Elections

The Los Angeles Chapter, A.I.C., has elected the following officers for 1948-1949: Chairman, Manuel Tubis of North Hollywood, Calif.; Vice chairman, Morris Katzman of Los Angeles; Secretary, Dr. Jacob A. Saffir of Los Angeles; Treasurer, Wilfred Nobel of National Lead Company, Los Angeles, and National Councilor, Dr. L. F. Pierce, the L. F. Pierce Laboratories, Los Angeles.

The Los Angeles Chapter is joining the newly created Technical Societies Council of Southern California, an organization to promote the mutual advantages of its constituent societies. The Chapter is also subscribing to a clipping bureau to receive press releases concerning chemists of that area, so as to afford the local chemical community an opportunity to present its point of view, its position on vital issues, and to combat undesirable publicity or legislation.

Food Research Laboratories Appoint Secretary

Dr. Bernard L. Oser, F.A.I.C., director of the Food Research Laboratories, Inc., 48-14 33rd Street, Long Island City 1, N. Y., announces that Jesse L. Weinberg has been named secretary of Food Research Laboratories. Mr. Weinberg has extensive experience in the development and production of flavors and essential oils.

New Jersey Chapter Elects

The New Jersey Chapter, A.I.C., announces that the following officers have been elected for 1948-1949: Chairman, Dr. D. L. Cottle, research chemist, Esso Laboratories, Elizabeth, N. J.; Vice chairman, Dr. R. W. McLachlan of Montclair, N. J.; Secretary, Harry Burrell, Interchemical Corporation, Newark, N. J.; Treasurer, John B. Rust, Montclair Research Corporation, Montclair, N. J., and Chapter councilors, Dr. G. P. Whitcomb, Dr. Emil G. Klarman, W. H. Smyers, Dr. W. A. Stanton, Dr. D. C. Bardwell, Dr. D. A. McLean, and Dr. A. G. Hill. Herbert W. Mackinney, research chemist, Bakelite Corporation, Bloomfield, N. J., was elected as representative of the New Jersey Chapter to the National Council, A.I.C.

Neidig With Atlantic Refining

Charles P. Neidig, F.A.I.C., is now in charge of market research on chemical products at Atlantic Refining Company, 260 South Broad Street, Philadelphia 1, Pennsylvania.

Columbia's Salaries

Columbia University's associate professors received a raise in salary on July first. Under the new schedule, they will receive a minimum of $6,000 and a maximum of $7,000 a year. Future plans include a salary schedule for full professors to raise the minimum to $9,000 and the maximum to $15,000. Plans for instructor's salaries are a minimum of $2,500 to a maximum of $3,600. The university announced that these increases are necessary "in view of prevailing conditions, for the well-being of our teachers."

Ohio Chemists Council

Ohio Chemists Council is the new name of the Ohio Chemists Committee on Professional Practice (OC_2P_2), according to an amendment to the articles of incorporation filed with and approved by the Secretary of State of Ohio, in Columbus, August fourth.

New officers elected at the annual meeting held in Columbus, July 31st, are: Herman S. Sherman of The Sherwin-Williams Company, Cleveland, chairman; William J. Neill, F.A.I.C., of Columbus Metal Products Company, Columbus, vice-chairman; and Harold A. Lamlein, of Landers Corporation, Toledo, re-elected secretary.

At a meeting of the Board of Governors held following the annual meeting, it was unanimously voted to continue the Council's strenuous fight to prevent encroachment of the fields of work for chemists by the proposal of the Ohio State Medical Association that all laboratories approved for serological tests under the Ohio prenatal and premarital laws be directed by those holding the M.D. degree exclusively. The Council's opposition to this proposal has been directed by Dr. E. L. Luaces, F.A.I.C., who with Dr. James R. Withrow, F.A.I.C., are representatives on the Board of Governors of the Ohio Chemists Council.

Dow Awarded Medal

Dr. Willard H. Dow, F.A.I.C., president of Dow Chemical Company, has been selected to receive the 1948 award of the American Society for Metals for his advancement of research in 1948. The medal will be presented at the annual meeting of the society to be held in Philadelphia, October 28th, during the National Metal Congress and Exposition. Dr. Dow was awarded the Chandler medal of Columbia University in 1943; the 1944 Gold Medal of THE AMERICAN INSTITUTE OF CHEMISTS, and the 1946 medal of the Society of Chemical Industry.

Charles W. Rivise, F.A.I.C., of Caesar & Rivise, Philadelphia, Penna., delivered the lecture on "Claim Drafting," July sixth, as part of the course "Current Problems in Patent Law," given by the Practising Law Institute, New York, N. Y.

Condensates

Ed. F. Degering, F.A.I.C.

A new aircraft lacquer developed by the Monsanto Chemical Company, will not support combustion when used on fabric-covered planes, acts as a tautening agent, adds measurable structural strength as the covering tightens around the airframe, and combines increased weather resistance with ease of application.

Sir Alexander Fleming recently said that Penicillin is the most powerful chemotherapeutic drug yet found. Even when diluted 80,000,000 times, it still will inhibit the growth of staphylococci.

Damage caused by insects in an average year totals about $169,500,000 to cotton; $136,300,000 to corn; $126,000,000 to fruits and nuts; $91,400,000 to potatoes; $67,600,000 to vegetables, and $18,500,000 to beans and peas, or a grand total of $609,900,000.

Circulin is a new antibiotic of the gram negative type, which has been discovered by Prof. P. A. Tetrault and associates in the biological laboratories of Purdue University.

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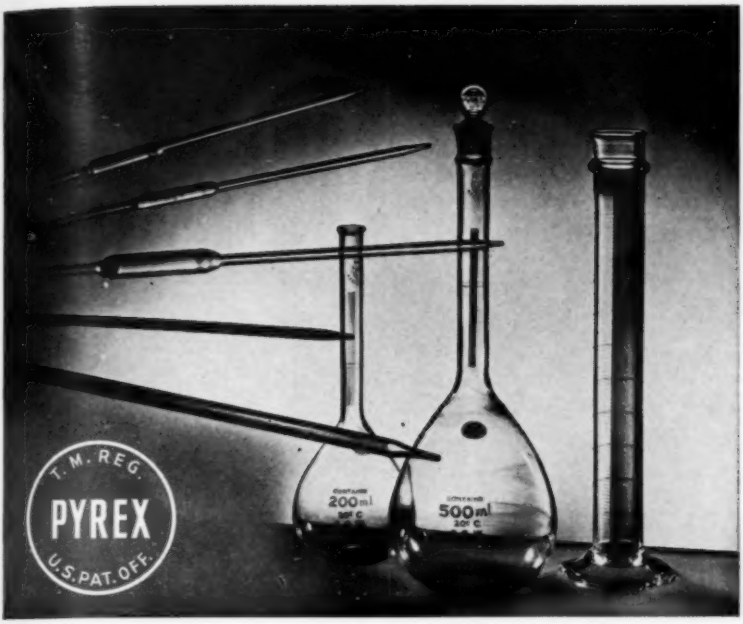

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